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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,175	01/23/2004	Purva R. Rajkoti	2003.09.005.WS0	7867
23990	7590	02/25/2010		
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			EXAMINER FIGUEROA, MARISOL	
			ART UNIT 2617	PAPER NUMBER
			NOTIFICATION DATE 02/25/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/764,175

Applicant(s)

RAJKOTIA, PURVA R.

Examiner

Marisol Figueroa

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 and 31-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 31, 38 and 41-44 is/are rejected.
- 7) ☒ Claim(s) 14-18, 32-37, and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date _____
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(c) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 01/26/2010 has been entered.

Response to Arguments

2. Claims 13-18 and 31-44 are pending in the present application.

3. The indicated allowability of claims 13-18 (see Examiner's Answer filed on 01/30/2008) is withdrawn in view of the newly discovered reference(s) to CHOI (KR 2001-066277 A). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 13, 31, and 38** are rejected under 35 U.S.C. 102(b) as being anticipated by CHOI (KR 2001-066277 A). Refer to Derwent document # 2002-357489 for English translation of CHOI's abstract.

Regarding claim 13, Choi discloses, for use in a wireless network, a method of operating a base station during a call set-up procedure, the method comprising the steps of:

transmitting null frames from said base station to a mobile station during the call set-up procedure (see abstract and description; Choi teaches a base station transmitting a null frame to a mobile station);

during the call set-up procedure, detecting in a preamble frame detector of said base station preamble frames from said mobile station (see abstract and description; the BS obtains (i.e., detects) a preamble from the mobile station); and

adjusting a power level of said null frames transmitted to said mobile station by said base station (see abstract and description; Choi teaches a call set up method that variably assigns a power (i.e., adjusting power) of a traffic channel when transmitting null traffic).

Regarding claim 31, Choi discloses, for use in a wireless network, a base station capable of releasing a call between said base station and a mobile station during a call set-up procedure, said base station comprising:

a transmitter that transmits null frames from the base station to a mobile station during the call set-up procedure (see abstract and description; Choi teaches a base station transmitting a null frame to a mobile station; note that a transmitter is an inherent component of a base station);

a preamble frame detector that detects preamble frames transmitted to the base station by the mobile station during the call set-up procedure (see abstract and description; the BS obtains (i.e., detects) a preamble from the mobile station; note that a preamble frame detector is inherent given that the base station completes the setting of the call when it detects the preamble from the mobile station); and

a transmit power controller that adjusts a power level of null frames transmitted by the base station during the call set-up procedure (see abstract and description; Choi teaches a call set up method that variably assigns a power (i.e., adjusting power) of a traffic channel when transmitting null traffic; note that the power controller is inherent given that the BS variably assigns a power to the traffic channel).

Regarding claim 38, Choi discloses a wireless network comprising a plurality of base stations, each of said plurality of base stations capable of releasing a call between said base station and a mobile station during a call set-up procedure, wherein said each base station comprises:

a transmitter that transmits null frames from the base station to a mobile station during the call set-up procedure (see abstract and description; Choi teaches a base station transmitting a null frame to a mobile station; note that a transmitter is an inherent component of a base station);

a preamble frame detector that detects preamble frames transmitted to the base station by the mobile station during the call set-up procedure (see abstract and description; the BS obtains (i.e., detects) a preamble from the mobile station); and

a transmit power controller that adjusts a power level of null frames transmitted by the base station during the call set-up procedure (see abstract and description; Choi teaches a call set up method that variably assigns a power (i.e., adjusting power) of a traffic channel when transmitting null traffic; note that the power controller is inherent given that the BS variably assigns a power to the traffic channel).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 41-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over CHOI in view of BROOKS et al. (US 2002/0090947).

Regarding claim 41, Choi discloses the wireless network as set forth in Claim 38, but does not particularly disclose further comprising: a fade timer that has a configurable value, wherein the fade timer is started when the preamble frame detector detects the at least one missing preamble frame from the mobile station, and wherein the transmitter stops transmitting the null frames to the mobile station when the preamble frame detector detects the at least one missing preamble frame from the mobile station.

However, Brooks teaches a base station in a wireless network comprising a fade timer that has a configurable value, wherein the fade timer is started when the preamble frame detector detects the at least one missing preamble frame from the mobile station, and wherein the transmitter stops transmitting the null frames to the mobile station when the preamble frame detector detects the at least one missing preamble frame from the mobile station (paragraph 23; the base station includes a timer (i.e., fade timer) that is started when the base station does not receives usable reverse frames (i.e., missing preambles), the base station ends the transmission on the forward channel (i.e., null frames) and the call is dropped). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Choi to

include in the base station, a fade timer that has a configurable value, wherein the fade timer is started when the preamble frame detector detects the at least one missing preamble frame from the mobile station, and wherein the transmitter stops transmitting the null frames to the mobile station when the preamble frame detector detects the at least one missing preamble frame from the mobile station, as suggested by Brooks, since such a modification would allow the base station to detect a drop call by the loss of the reverse traffic channel during a period of time as determined by the timer.

Regarding claim 42, the combination of Choi and Brooks disclose the wireless network as set forth in Claim 41, in addition Brooks discloses wherein at least one of the base stations releases a call between the base station and the mobile station when one of: the fade timer expires and a maximum power level for the null frames is exceeded (p.0023; the base station drops the call when it does not receive the reverse traffic channel frames for a period of time, i.e., fade timer expires). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Choi to include wherein at least one of the base stations releases a call between the base station and the mobile station when the fade timer expires, as suggested by Brooks, since such a modification would allow the base station to free up communication resources after a period of time of detecting the loss of the reverse traffic channel.

8. **Claim 43** is rejected under 35 U.S.C. 103(a) as being unpatentable over CHOI in views of BROOKS et al. and CHUN et al. (US 2002/0068586).

Regarding claim 43, the combination of Choi and Brooks disclose the wireless network as set forth in Claim 41, but does not particularly disclose wherein the configurable value of the fade timer is less than five seconds.

However, Chun teaches a fade timer with a configurable value that is less than five seconds (paragraph 70; Chun teaches a fader timer (i.e., timer Val1) for determining a drop call at the base station that ranges from 0 to 10 seconds depending on a system operation state, in his invention is preferably set to 1.2 seconds that is a shorter time than the typical 5 seconds for releasing a call in the prior art). Therefore, it would have been obvious to a person having ordinary skill in the art the time of the invention, to modify the combination to configure the configurable value of the fade timer to less than five seconds, as suggested by Chun, since it is standard that such a value varies depending on the system operation state. Furthermore, it would reduce the time of releasing calls at the base station.

9. **Claim 44** is rejected under 35 U.S.C. 103(a) as being unpatentable over CHOI in views of BROOKS et al., CHUN et al., and RAAF et al. (US 2004/0029604 A1).

Regarding claim 44, the combination of Choi, Brooks, and Chun disclose the wireless network as set forth in Claim 43, but does not particularly disclose wherein the mobile station transmits the preamble frames received by at least one of the base stations at an increased power level in response to the mobile station detecting a missing null frame transmitted by the at least one base station.

However, Raaf teaches wherein a mobile station transmits the preamble frames received by at least one of the base stations at an increased power level in response to the mobile station detecting a missing null frame transmitted by the at least one base station (paragraphs 33, 40, and

41; a mobile station waits for the reception of an acknowledgement message (i.e., fairly characterized as null frames) for a particular period of time and if no acknowledgement is received within the period of time (i.e., missing null frame), the ideal power is recalculated by incrementing the last ideal power by a power ramp step and sending the preamble frames with the new recalculated ideal power (i.e., increased power)). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include wherein the mobile station transmits the preamble frames received by at least one of the base stations at an increased power level in response to the mobile station detecting a missing null frame transmitted by the at least one base station, as suggested by Raaf, in order for the preamble frames to be transmitted at an adequate power level so that the base station is able to receive the preambles and acknowledge their reception.

Allowable Subject Matter

10. **Claims 14, 32, and 39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 15-18, 33-37, and 40 are objected as being dependant on claims that have been objected.

Claim Objections

12. **Claim 41** is objected to because of the following informalities:

(a) Claim 1 apparently should be dependant on claim 39 due to the recitation of “the at least one missing preamble” in lines 3-4, previously mentioned on claim 39. Appropriate correction is required.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marisol Figueroa/
Examiner, Art Unit 2617